

FIG. 1

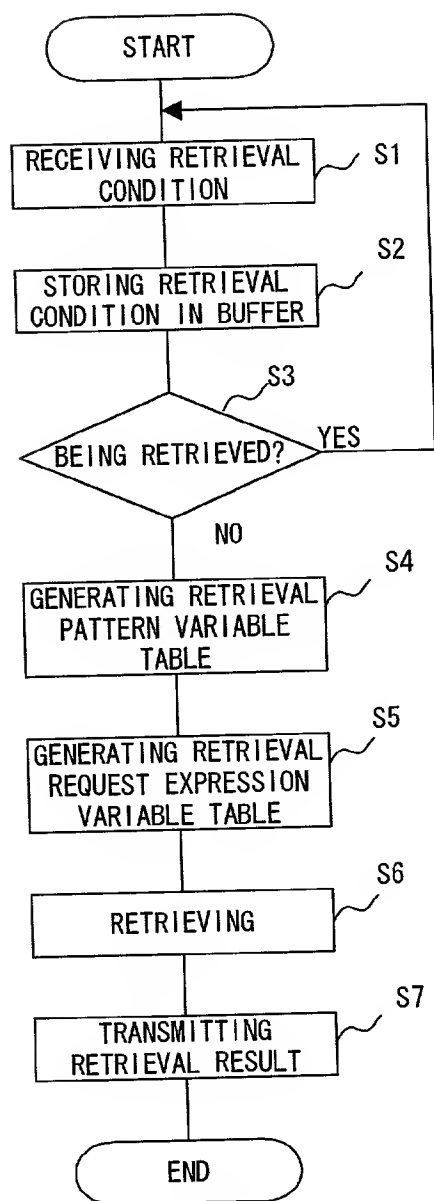


FIG. 2

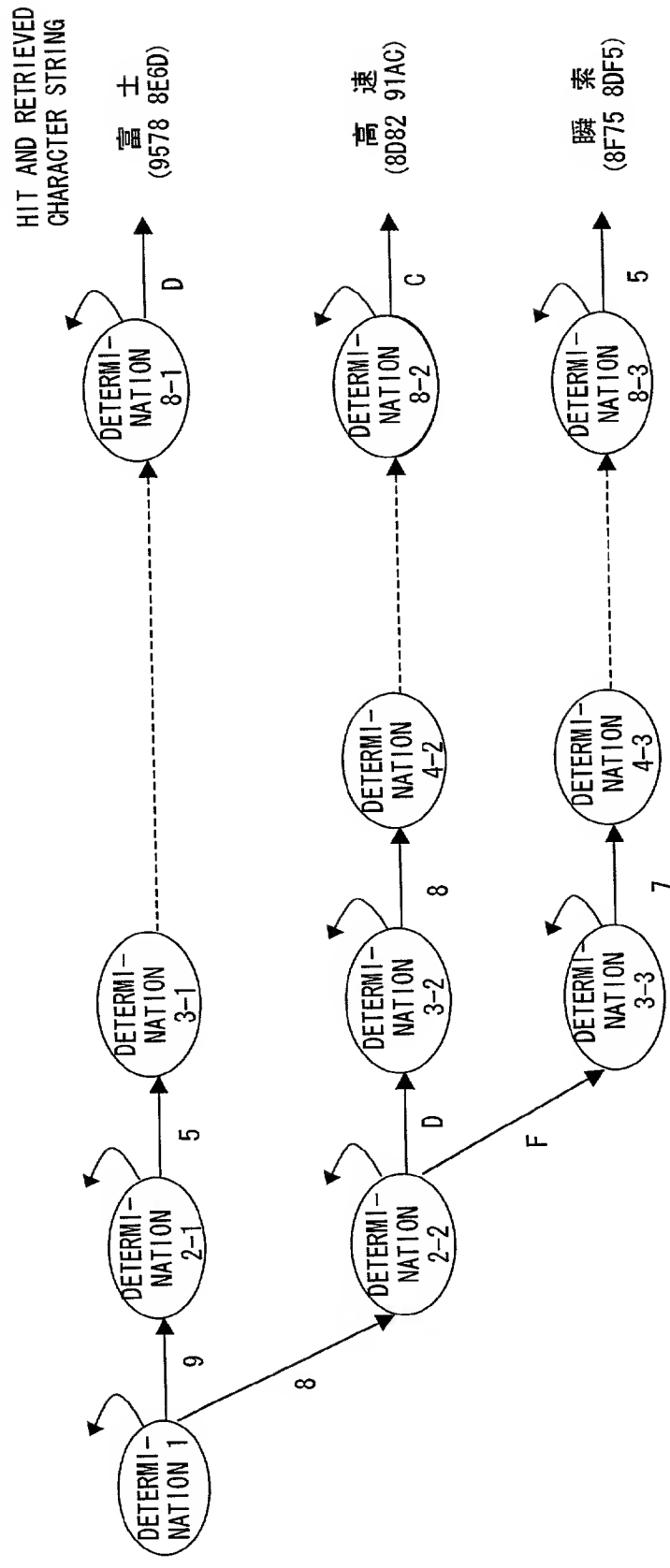


FIG. 3

DETERMINATION TARGET 4-BIT VALUE	NEXT DETERMINATION TABLE ADDRESS
0	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
1	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
2	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
3	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
4	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
5	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
6	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
7	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
8	DETERMINATION TABLE ADDRESS OF [DETERMINATION 2-2]
9	DETERMINATION TABLE ADDRESS OF [DETERMINATION 2-1]
10	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
11	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
12	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
13	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
14	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]
15	DETERMINATION TABLE ADDRESS OF [DETERMINATION 1]

FIG. 4

FIG. 5A is a diagram illustrating a sequence of operations on a data structure. The diagram shows three tables, each representing a state of the data structure. The first table, labeled 'del_abcd', shows a sequence of operations where the first four elements (A, B, C, D) are removed. The second table, labeled 'del_bcde', shows the next state where the next four elements (B, C, D, E) are removed. The third table, labeled 'del_com', shows the final state where the next four elements (C, D, E, F) are removed. The sequence of operations is indicated by arrows pointing from the first table to the second, and from the second to the third.

PATTERN = {ABCD, BCDE}

A	B	C	D	E	F	Z
3	2	1	0	4	4	4.....4	4

del_abcd

A	B	C	D	E	F	Z
4	3	2	1	0	4	4.....4	4

del_bcde

A	B	C	D	E	F	Z
3	2	1	L	L	4	4.....4	4

del_com

(L(large)=textlen+4+1)

FIG. 5A

PATTERN = {ABCD, BCDE, CDFE}

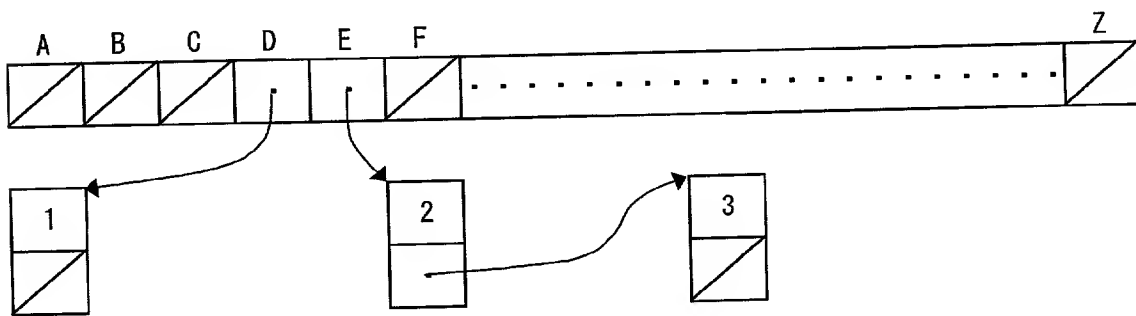


FIG. 5B

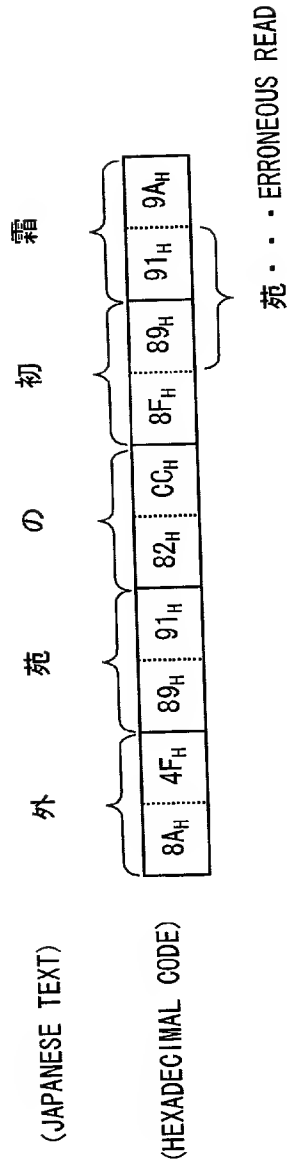


FIG. 6

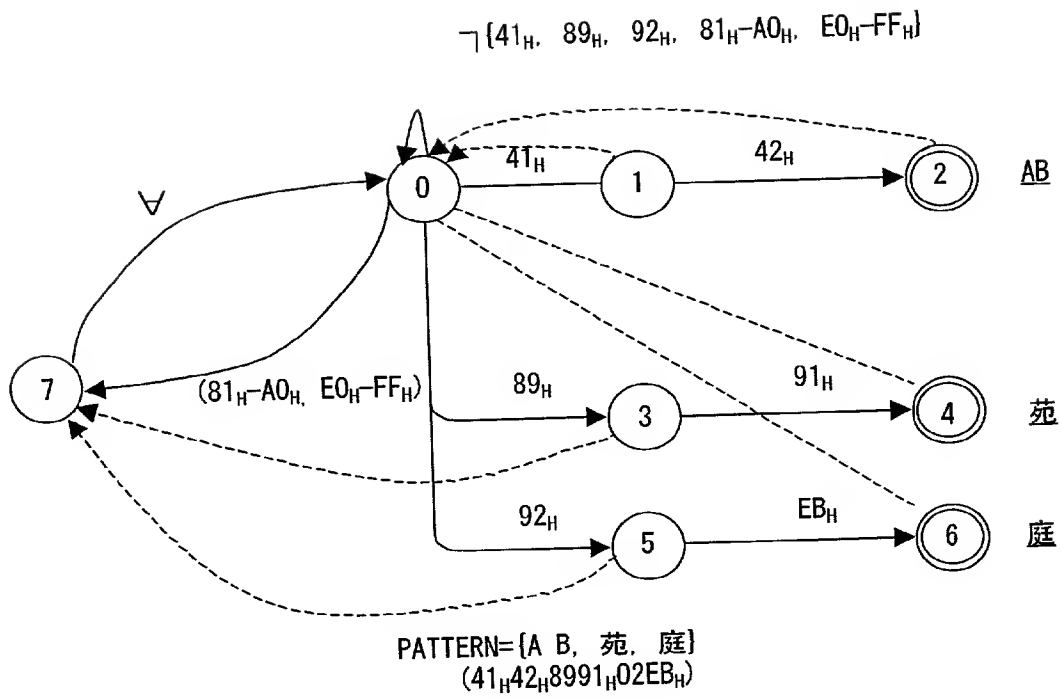


FIG. 7

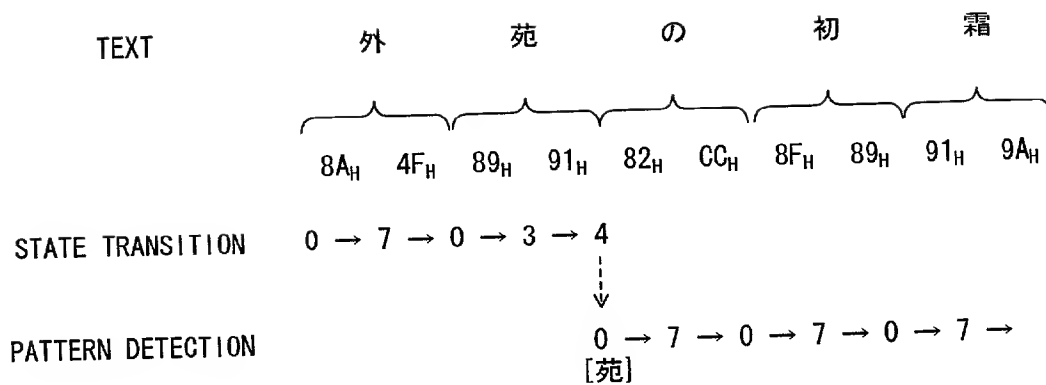


FIG. 8

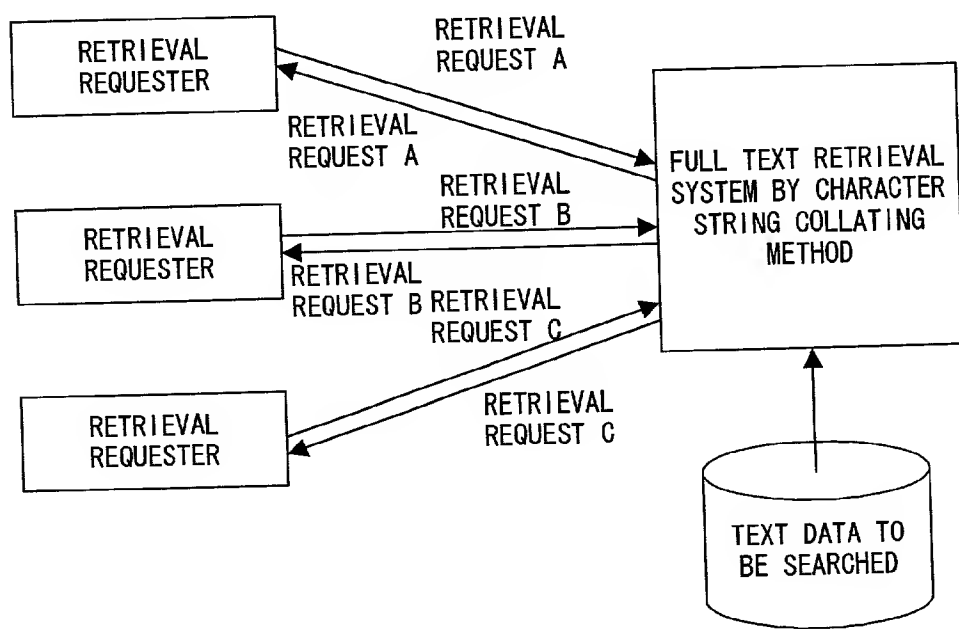


FIG. 9

CONTENTS OF TEXT DATA TO BE SEARCHED

[K] <NAME>MASATAKA MATSUURA [K] <GRADUATE OF>WASEDA UNIVERSITY [K] <BIRTH PLACE>KANAGAWA PREF. [K] <SEX>MALE [K] [R]
[K] <NAME>YOKO TABATA [K] <GRADUATE OF>TSUKUBA UNIVERSITY [K] <BIRTH PLACE>ISHIKAWA PREF. [K] <SEX>FEMALE [K] [R]
[K] <NAME>SHIRO ABE [K] <GRADUATE OF>KYUSHU UNIVERSITY [K] <BIRTH PLACE>OITA PREF. [K] <SEX>MALE [K] [R]

(NOTE) [R]: RECORD DELIMITER, [K]: ITEM DELIMITER, <CHARACTER STRING>: ITEM IDENTIFIER CODE (ITEM TAG)

RETRIEVAL REQUEST

	ITEM TAG	WORD TO BE RETRIEVED
A	<NAME>	MASATAKA MATSUURA
B	<GRADUATED FROM>	WASEDA UNIVERSITY
RETRIEVAL CONDITION EXPRESSION	A and B	

FIG. 11

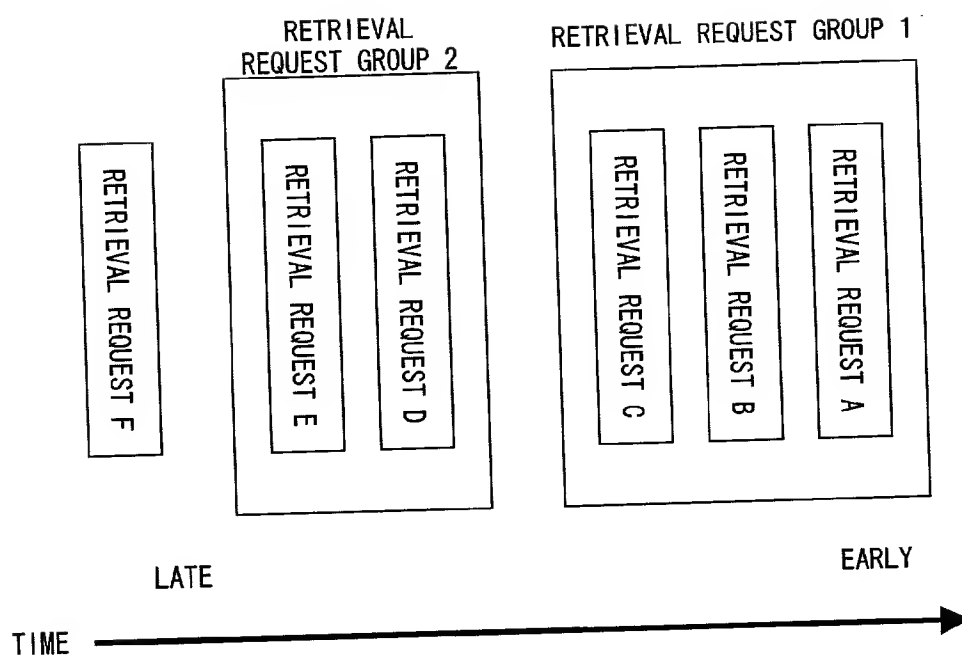


FIG. 12

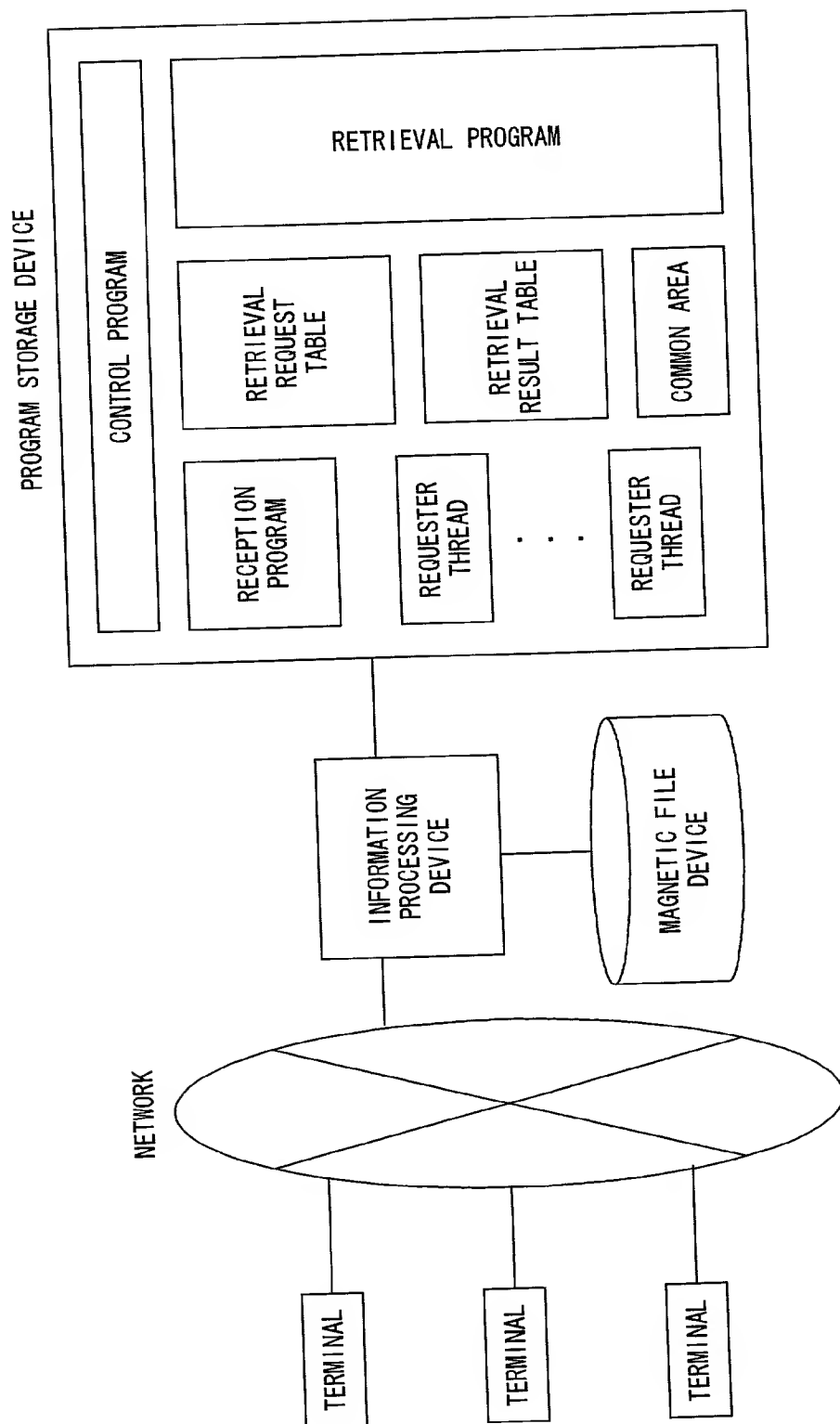


FIG. 13

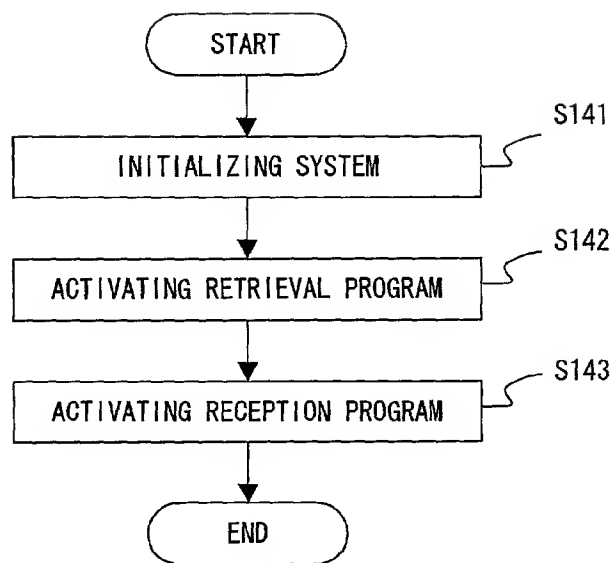


FIG. 14

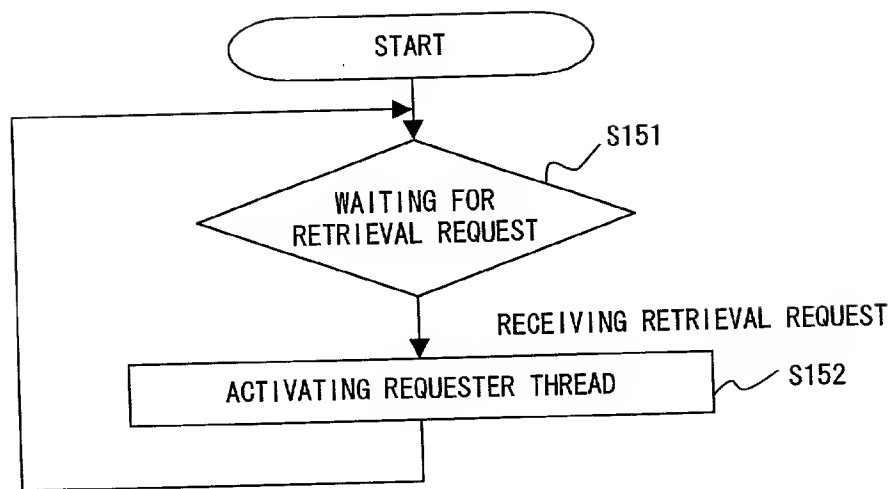


FIG. 15

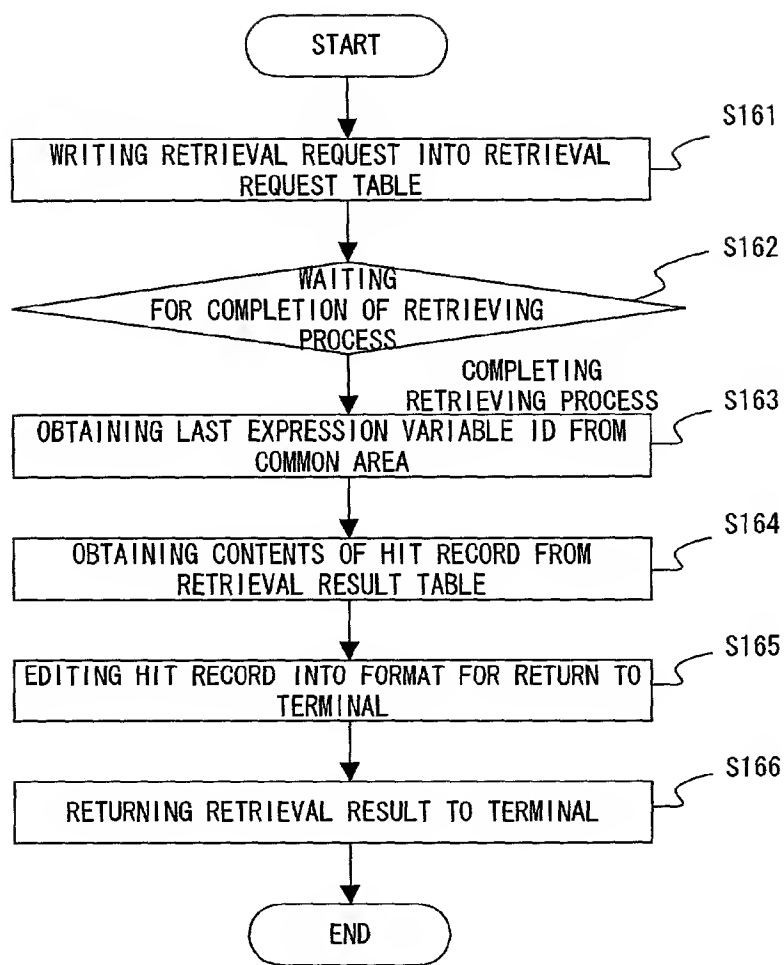


FIG. 16

RETRIEVAL REQUEST TABLE

	ITEM TAG	WORD TO BE RETRIEVED
A	<NAME>	MASATAKA MATSUURA
B	<GRADUATE FROM>	WASEDA UNIVERSITY
	RETRIEVAL CONDITION EXPRESSION	A and B
A	<GRADUATE FROM>	TSUKUBA UNIVERSITY
B	<BIRTH PLACE>	KANAGAWA PREF.
	RETRIEVAL CONDITION EXPRESSION	A or B
A	<SEX>	MALE
B	<BIRTH PLACE>	OITA PREF.
	RETRIEVAL CONDITION EXPRESSION	A and B

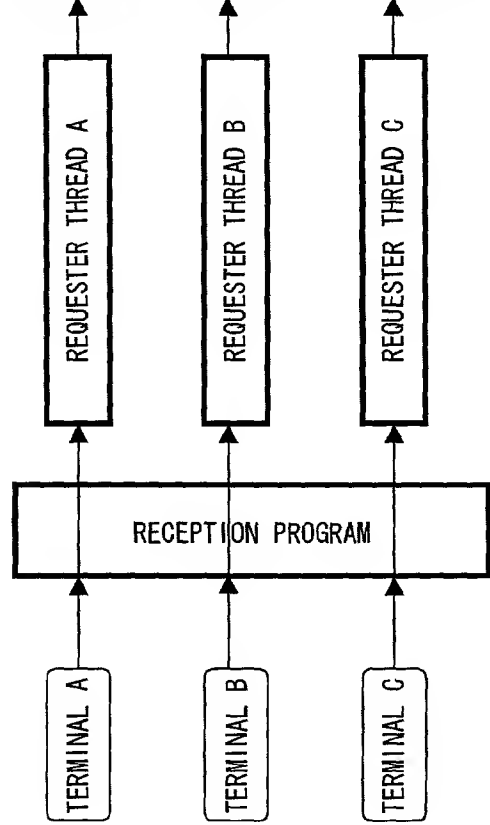


FIG. 17

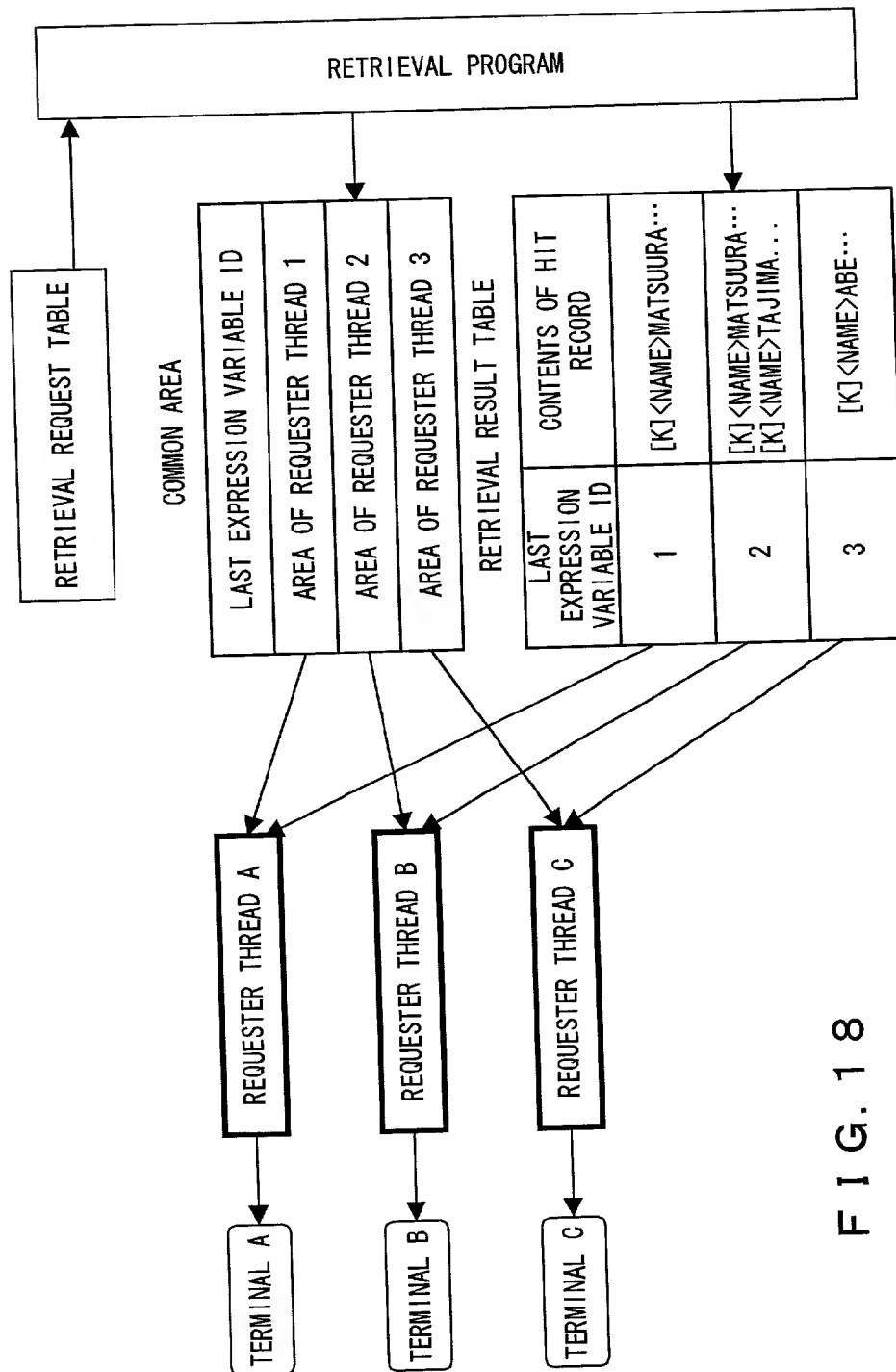


FIG. 18

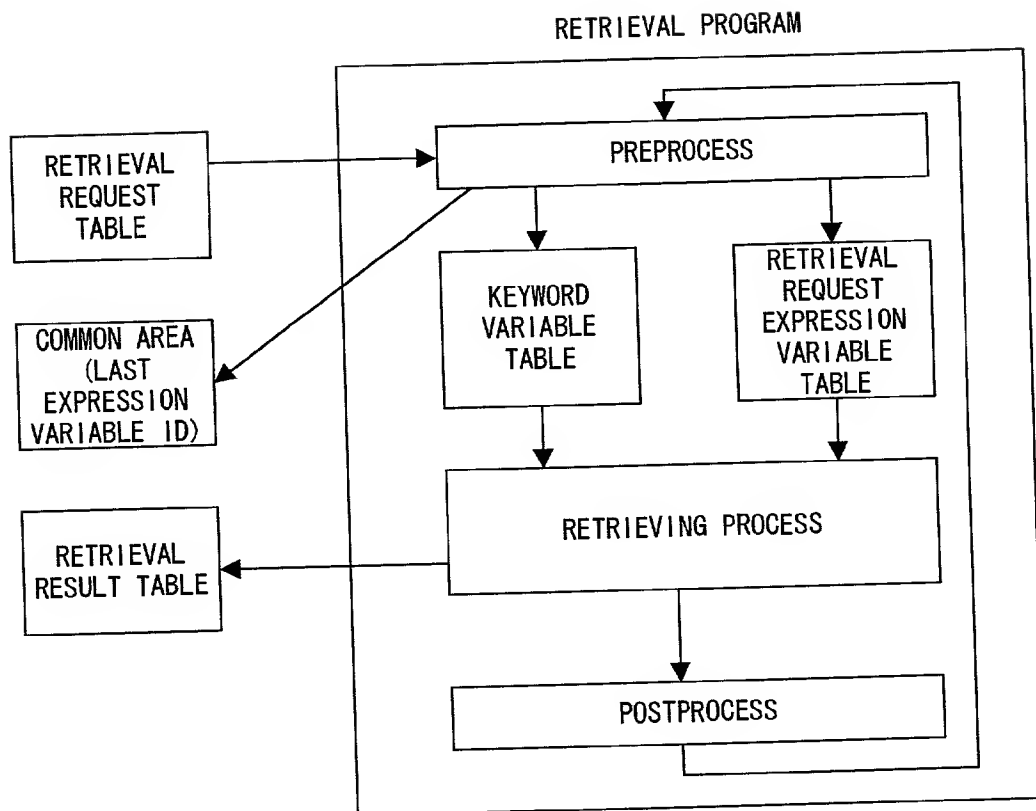


FIG. 19

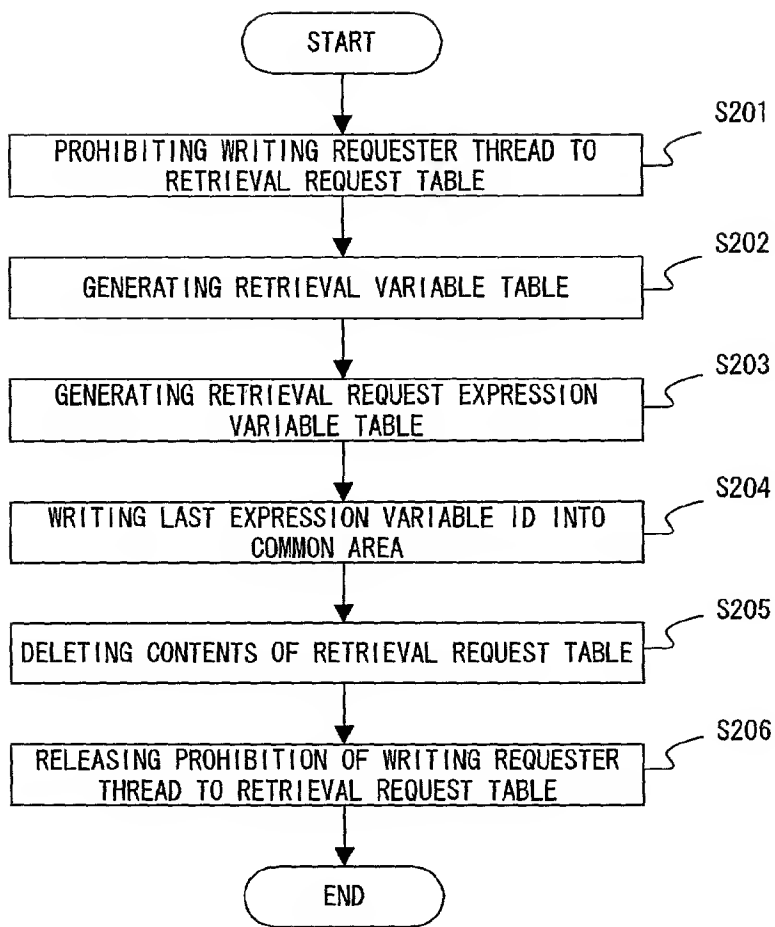


FIG. 20

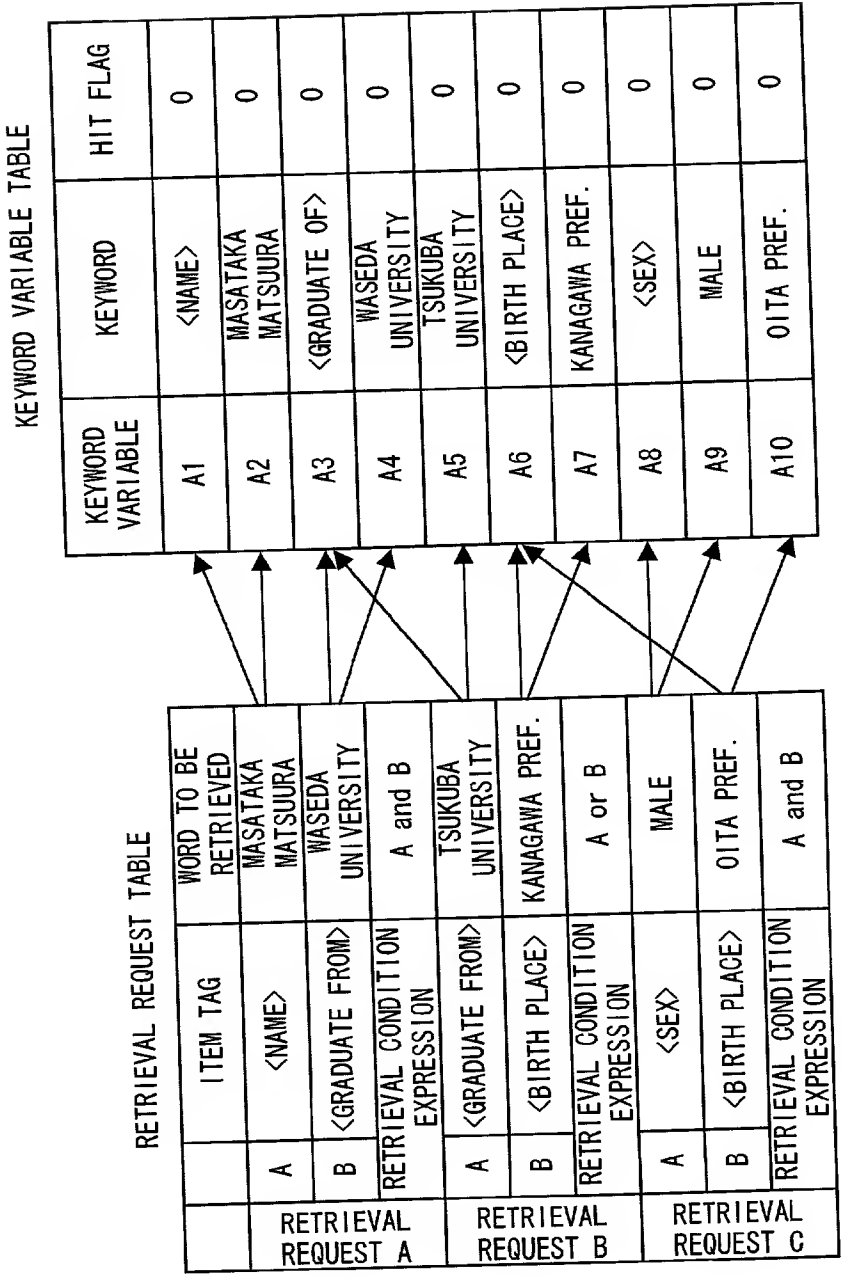


FIG. 21

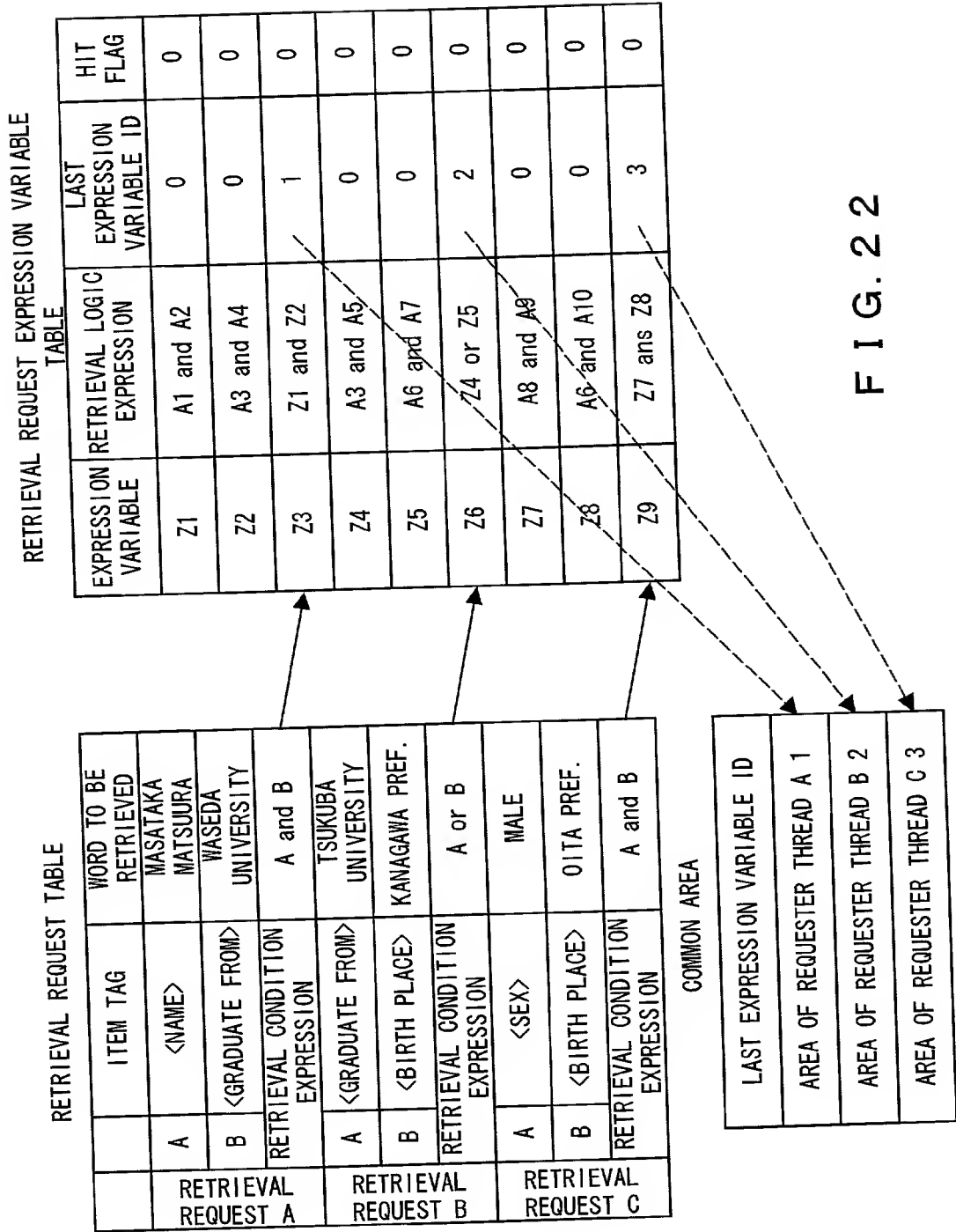


FIG. 22

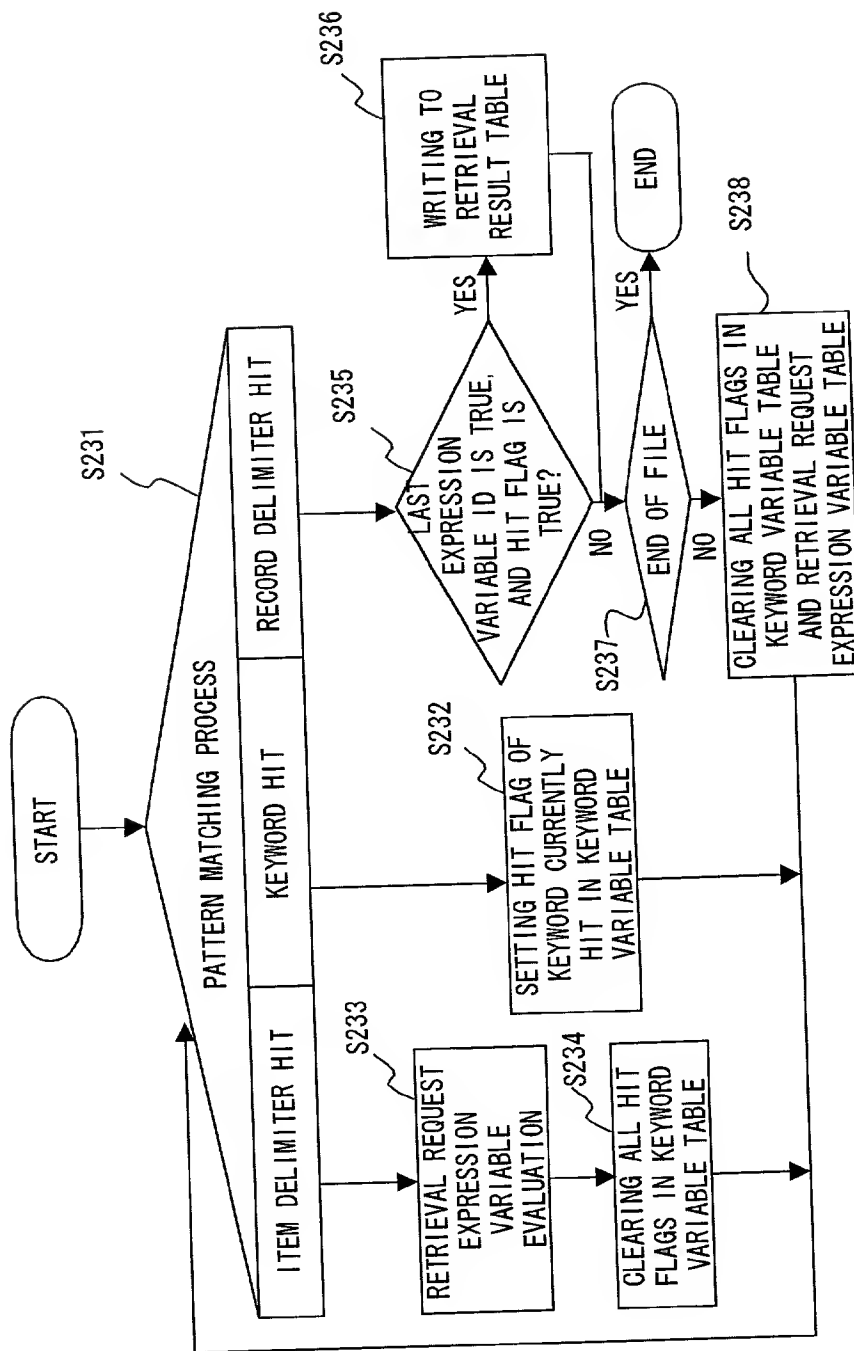


FIG. 23

KEYWORD VARIABLE TABLE

KEYWORD VARIABLE	CHARACTER STRING TO BE RETRIEVED	HIT FLAG
A1	<NAME>	1
A2	MASATAKA MATSUURA	1
A3	<GRADUATE OF>	0
A4	WASEDA UNIVERSITY	0
A5	TSUKUBA UNIVERSITY	0
A6	<BIRTH PLACE>	0
A7	KANAGAWA PREF.	0
A8	<SEX>	0
A9	MALE	0
A10	OITA PREF.	0

FIG. 24A

RETRIEVAL REQUEST EXPRESSION VARIABLE TABLE

EXPRESSION VARIABLE	LAST EXPRESSION VARIABLE ID	LAST EXPRESSION VARIABLE ID	HIT FLAG
Z1	A1 and A2	0	1
Z2	A3 and A4	0	1
Z3	Z1 and Z2	1	0
Z4	A3 and A5	0	0
Z5	A6 and A7	0	0
Z6	Z4 or Z5	2	0
Z7	A8 and A9	0	0
Z8	A6 and A10	0	0
Z9	Z7 and Z8	3	0

FIG. 24B

KEYWORD VARIABLE TABLE

KEYWORD VARIABLE	CHARACTER STRING TO BE RETRIEVED	HIT FLAG
A1	<NAME>	0
A2	MASATAKA MATSUURA	0
A3	<GRADUATE OF>	0
A4	WASEDA UNIVERSITY	0
A5	TSUKUBA UNIVERSITY	0
A6	<BIRTH PLACE>	0
A7	KANAGAWA PREF.	0
A8	<SEX>	1
A9	MALE	1
A10	OITA PREF.	0

F I G. 2 5 A

RETRIEVAL REQUEST EXPRESSION VARIABLE TABLE

EXPRESSION VARIABLE	RETRIEVAL LOGIC EXPRESSION	LAST EXPRESSION VARIABLE ID	HIT FLAG
Z1	A1 and A2	0	1
Z2	A3 and A4	0	1
Z3	Z1 and Z2	1	1
Z4	A3 and A5	0	0
Z5	A6 and A7	0	1
Z6	Z4 or Z5	2	1
Z7	A8 and A9	0	1
Z8	A6 and A10	0	0
Z9	Z7 and Z8	3	0

F I G. 2 5 B

RETRIEVAL RESULT TABLE

LAST EXPRESSION VARIABLE ID	CONTENTS OF HIT RECORD
1	[K] <NAME>MATSUURA...
2	[K] <NAME>MATSUURA...
3	

F I G . 2 6

CONTENTS OF TEXT DATA TO BE SEARCHED ACCORDING TO SECOND EMBODIMENT

...MASATAKA MATSUURA...WASEDA UNIVERSITY...KANAGAWA PREF.MALE[K] [R]
...YOKO TAJIMA...TSUKUBA UNIVERSITY...ISHIKAWA PREF.FEMALE[K] [R]
SHIRO ABE.....KYUSU UNIVERSITY...OITA PREF.MALE[K] [R]

(NOTE) [R]:RECORD DELIMITER, [K]:ITEM DELIMITER

F I G. 2 7

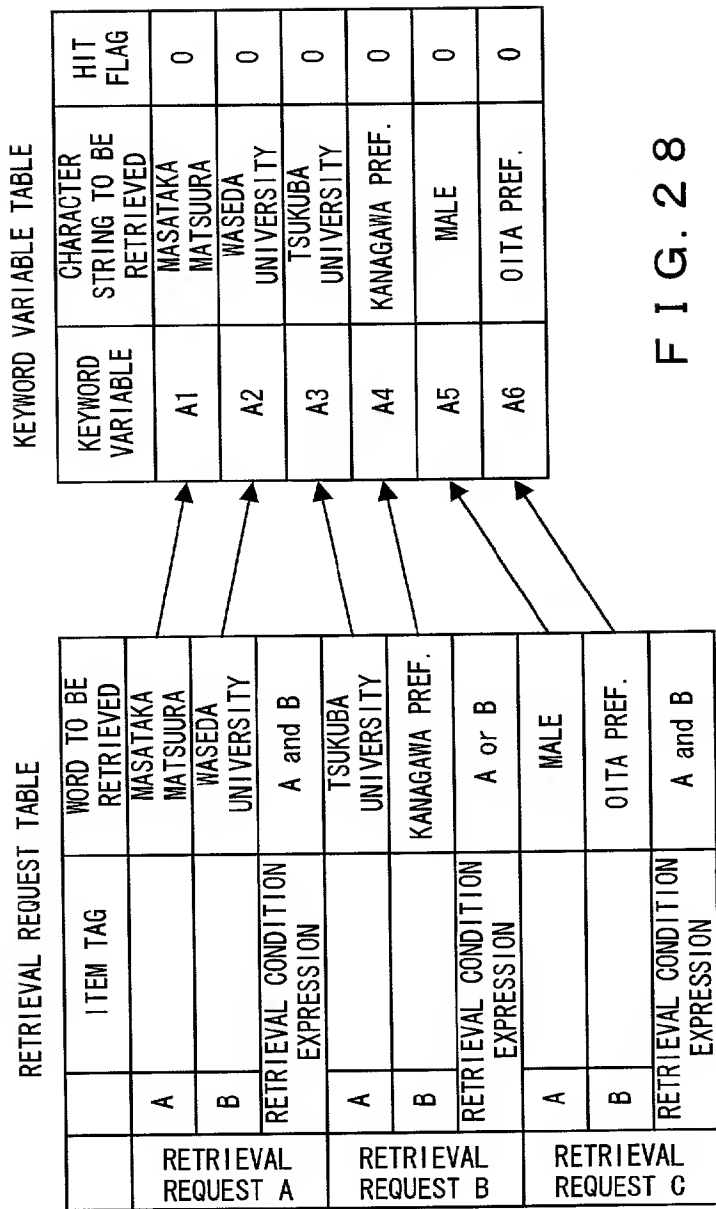


FIG. 28

RETRIEVAL REQUEST TABLE

	ITEM TAG	WORD TO BE RETRIEVED
RETRIEVAL REQUEST A	A	MASATAKA MATSUJURA
	B	WASEDA UNIVERSITY
	RETRIEVAL CONDITION EXPRESSION	A and B
RETRIEVAL REQUEST B	A	TSUKUBA UNIVERSITY
	B	KANAGAWA PREF.
	RETRIEVAL CONDITION EXPRESSION	A or B
RETRIEVAL REQUEST C	A	MALE
	B	OITA PREF.
	RETRIEVAL CONDITION EXPRESSION	A and B

RETRIEVAL REQUEST EXPRESSION VARIABLE TABLE

EXPRESSION VARIABLE	RETRIEVAL LOGIC EXPRESSION	LAST EXPRESSION VARIABLE ID	HIT FLAG
Z1	A1 and A2	1	0
Z2	A3 or A4	2	0
Z3	A5 and A6	3	0

FIG. 29

KEYWORD VARIABLE TABLE

KEYWORD VARIABLE	CHARACTER STRING TO BE RETRIEVED	HIT FLAG
A1	MASATAKA MATSUURA	1
A2	WASEDA UNIVERSITY	1
A3	TSUKUBA UNIVERSITY	0
A4	KANAGAWA PREF.	1
A5	MALE	1
A6	OITA PREF.	0

FIG. 30A

RETRIEVAL REQUEST EXPRESSION VARIABLE TABLE

EXPRESSION VARIABLE	RETRIEVAL LOGIC EXPRESSION	LAST EXPRESSION VARIABLE ID	HIT FLAG
Z1	A1 and A2	1	1
Z2	A3 or A4	2	1
Z3	A5 and A6	3	0

FIG. 30B

RETRIEVAL RESULT TABLE

LAST EXPRESSION VARIABLE ID	CONTENTS OF HIT RECORD
1	MASATAKA MATSUURA... ..
2	MASATAKA MATSUURA... ..
3	

F I G. 3 1

